REMARKS

This is in response to the Office Action dated September 2, 2004 in the above-captioned application. The required three month extension fee is submitted herewith. Reconsideration and withdrawal of the Examiner's rejections and objections is respectfully solicited in view of the above Amendment and the following remarks.

Claims 1-23 stand rejected in the present application. Claim 1-3, 5-10 and 21-23 have been amended, claims 4 and 11-20 have been cancelled, and new claims 24-61 have been added by way of this Amendment. Claims 1-3, 5-10, 21-61 are currently pending and at issue in the present application.

The Examiner has objected to the title "System and Method For Data Encryption" as not being descriptive of Applicant's invention. Although Applicant respectfully disagrees with the objection, Applicant has amended to title to "System and Method For Data Encryption Involving Order Determination and Generation of Position and Control Codes" to more particularly describe the claimed invention.

Claim 18 has been objected to as being in improper dependent form. Claim 18 has been cancelled.

Claim 9 stands rejected as indefinite under 35 U.S.C. §112 for failing to particularly point out and distinctly claim the subject matter of the invention. Applicant has amended claim 9 to depend on claim 8 thereby providing sufficient antecedent basis for "the plurality of block codes." Applicant therefore respectfully requests that the rejection of claim 9 as indefinite be withdrawn.

The Examiner rejected claims 1-3, 5, and 8-10 as under 35 U.S.C. §102(b) anticipated by Cellier et al (U.S. Patent No. 5,884,269). The Examiner rejected claims 6-

7 as unpatentable under 35 U.S.C. §103(a) as obvious over Cellier et al in view of Shimizu et al (U.S. Patent No. 6,772,343). Claims 21-23 stand rejected as being unpatentable over Cellier et al in view of the Schneier Applied Cryptography publication.

Applicant respectfully submits that, in view of the above Amendment, that the Section 102 and 103 rejections may be properly withdrawn. Amended independent claims 1 and claims 2-10, 47-61 dependent thereon, amended independent claim 21 and claim 22 dependent thereon, and amended independent claim 23 and claims 24-46 dependent thereon, recite, *inter alia*, methods and a computer usable medium storing a computer program for encrypting an input data string. The order in which 2^n different configurations of n bits are to be identified in a position code is determined. A control code is generated that is associated with the determined order. A position code is generated indicating the position of 2^n different configurations of n bits in the input data string in accordance with the determined order. The control code and the position code are combined to form the encrypted data string.

The foregoing claimed subject matter is not disclosed in or suggested by Cellier et al. The Examiner has acknowledged that Cellier et al. does not disclose methods involving computer readable medium. (Office Action p.7) Claims 21-47 are thus clearly not anticipated by Cellier et al. A close reading of Cellier et al. also shows that it fails to disclose or suggest the subject matter of pending claims 1-3, 5-10 and 21-23 as amended.

More specifically, Cellier et al. generally discloses a system and method for compressing and decompressing digital audio data and includes a predictor, a best table selector, a Huffman table dictionary, Huffman weight tables and a coding output generator. The digital audio data is grouped into frames (see, e.g. Cellier et al. at Col. 3,

l.35-Col. 4, l.49), where each frame consists of serial sequence of samples. Each frame is provided as input to a predictor one sample at a time. The predictor predicts a current audio sample value based on previous audio sample values and generates a difference between the predicted audio sample value and the actual audio sample value as a prediction error output. The frame of prediction error samples are provided to the best table selector. The best table selector uses the Huffman weight tables to determine the number of code bits required to represent the frame of prediction error samples for each Huffman table and selects the Huffman table that yields the most efficient compression output or "minimum cost." The selected Huffman table is used to encode the prediction error samples for the current frame (see e.g. Cellier et al., at Col. 4, l.46-67.).

Cellier et al. does not disclose or suggest Applicant's claimed method of encryption recited in amended claim 1 of determining an order in which 2^n different configurations of n bits are to be identified in a position code and generating a position code reflecting the position of the 2^n different configurations of n bits of an input data string in accordance with the determined order. Instead, as indicated above, Cellier et al. performs a comparative analysis of previous input samples with current input samples to generate a series of prediction errors and matches the generated prediction errors to the one of a plurality of pre-defined Huffman tables that generates the "minimum cost" output. The Cellier et al. process is disclosed by them as suffering from practical problems of low coding efficiency for "frames" over 2048 samples or below 512 samples. (Col. 3, l.49-54.)

Applicant respectfully submits that the above-stated deficiencies of the disclosure of Cellier et al. are not cured by the disclosure of Shimizu et al. Shimizu et al. generally

discloses a method and system for segmenting an input text string into a plurality of smaller blocks of data, dividing the segmented blocks of data into groups and encrypting the divided blocks of data using keys. A random number generator may be used to generate random numbers based on a seed retrieved from a seed storage device. The generated random number defines random block lengths for the segmented blocks.

Shimizu et al. does not disclose or suggest determining an order in which 2^n different configurations of n bits are to be identified in a position code and generating a position code reflecting the position of 2^n different configurations of n bits in an input data string in accordance with the determined order as recited by the claims at issue.

Similarly, the Schneier et al. article does not disclose or suggest Applicant's claimed invention. Schneier merely discloses that any encryption methodology can be implemented in software and does not disclose or suggest the above-described deficiencies of Cellier et al. Schneier does not disclose or suggest the implementation of any specific encryption methods or systems, let alone the methods and system for encrypting an input data string as recited by the claims at issue.

Since Cellier et al standing alone does not disclose, and Shimizu et al or Schneier in combination with Cellier et al. fail to disclose or even suggest the use of a encryption method and system that determines an order in which 2^n different configurations of n bits are to be identified in a position code and generates a position code reflecting the position of 2^n different configurations of n bits in an input data string in accordance with the determined order as recited by the claims at issue, Applicant respectfully requests that the rejection of claims 1-3, 5-10, and 21-23 be withdrawn.

Since the prior art does not disclose each of the elements recited by the claims at issue, it follows that such claims are not anticipated thereby.

Furthermore, none of the prior art discloses or suggests that it would be desirable or even possible to determine an order in which 2^n different configurations of n bits are to be identified in a position code and generate a position code reflecting the position of 2^n different configurations of n bits in an input data string in accordance with the determined order as specified by the claims at issue. It is therefore evident that the claims are not obvious thereover. The prior art must disclose a suggestion of the incentive for the claimed combination of elements in order for a *prima facie* case of obviousness to be established. See *In re Sernaker*, 217 U.S.P.Q. 1 (Fed. Cir. 1983) and *Ex Parte Clapp*, 227 U.S.P.Q. 972, 973 (Bd, Pat. App. 1985). Accordingly, Applicant respectfully requests that the Section 103(a) obviousness rejections also be withdrawn.

New claims 24-46 depending from independent claim 23 and new claims 47-61 depending from independent claim 1 are supported by the specification and have been added to provide more comprehensive coverage of the disclosed invention. No new matter has been introduced by the addition of the new claims. Their subject matter is clearly patentable over the cited references for the foregoing reasons.

For the foregoing reasons, reconsideration and withdrawal of the rejection of the claims at issue and allowance thereof are respectfully requested.

Respectfully submitted,

ICE MILLER

By: Manisha Chakrabarti

Manisha Chakrabarti
Attorney No. 41665

ICE MILLER
One American Square, 31st Floor
Indianapolis, Indiana 46204
Telephone: (312) 726-8173
Facsimile: (312) 726-6254

Date: March 2, 2005